METALS AUSTRALIA LTD

ASX Announcement
28 February 2023

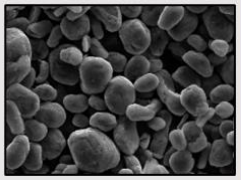
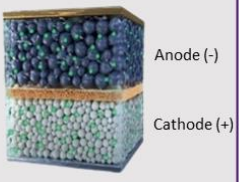
ASX:**MLS**

Premium Battery Grade 99.96% Spherical Graphite Purity Achieved for Lac Rainy Graphite Project in Quebec

Outstanding results elevate Lac Rainy to top-tier of high-quality graphite projects for supply of premium product to lithium-ion battery anode manufacturers

Highlights

- **Spherical graphite test work on concentrate from the Lac Rainy Graphite Project[1] has achieved, above premium battery-grade, 99.96% spherical graphite carbon (Cg) purity.**
- **Very high-quality spherical graphite has been produced, that exceeds the specifications required by lithium-ion battery anode manufacturers globally, including:**
  - **Very high yield of 63.5% recovered into the 20-micron spherical graphite product, well in excess of the industry average yield of 40-50%[2].**
  - **Consistent (very-steep) spherical graphite Particle Size Distribution (PSD) and spherical particle shape, after micronisation and spheroidization** (see Image 1).
  - **High Tap Density of 0.97 kg/litre** (density or battery-anode packing qualities of spheroids in lithium-ion battery)**. Well above acceptable standard of 0.90 kg/litre.**
- **The Company has now commenced electrochemical (lithium-ion battery charging and durability) testing of the highly-purified spherical graphite material.**
- **Over 10 times the drilled strike-length of graphitic trends[3] identified on the Project[4]. Immense potential for resource growth to be tested with new drilling program(s).**

Category:	JORC 2012 Mineral Resource	Grinding and Flotation Concentrate	Battery-Grade Spherical Graphite	Electrochemical Testwork
Graphite Grade/Purity	13.3Mt @ 11.5% Cg	96.3% Cg	99.96% Cg	Lithium-Ion Battery Anode
Product				

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Chairman Mike Scivolo commented: *"The achievement of premium battery grade spherical graphite purity, exceeding the specifications required by global lithium-ion battery manufacturers and using environmentally responsible, cost-effective methods - is an outstanding outcome for the Company.*

"This places the Lac Rainy Project in the top tier of high-quality graphite projects, with an ideal location close to North American markets where demand for such high-quality graphite products is high.

"We will now rapidly advance the project towards development, in parallel with finalising electrochemical test work in Germany and advancing discussions with potential offtakers."

Outstanding High-Purity Spherical Graphite Test Work Results:

Metals Australia Ltd (ASX:MLS) is very pleased to announce the achievement of **99.96% Cg spherical graphite purity, exceeding 99.95% Cg premium battery grade,** in metallurgical test work on flake graphite concentrate from the Company's high-grade Lac Rainy Graphite Project. Lac Rainy is situated in one of the world's premier graphite regions in Quebec, Canada (see location, Figure 1).

The spherical graphite (SpG) test work was carried out by the specialist graphite testing group, ProGraphite, in Germany, on Lac Rainy flake graphite concentrate which was re-assayed, producing a higher concentrate grade of **96.3% Cg** (Loss on Ignition - LOI) than the original assay at SGS in Canada[1].

The test work included three critical stages leading to the production of the high-quality, **99.96% Cg** purified premium spherical graphite product. These included:

i) **Micronisation** (hammer milling) of the concentrate feed which achieved the targeted 20-micron (µm) average particle size with low energy input, producing **very uniform micronised material suitable for spherical graphite production**.

ii) **Spheronisation** of the micronised material using lower impact hammer milling, which produced:

- a **very high recovery to spherical graphite product of 63.5% yield** - well above industry average of 40-50% yield[2].
- Spherical graphite particles which have a **steep (consistent) particle size distribution (PSD)** and well-rounded spherical particle shape (see Image 1, below).
- **Tap density** (the packing qualities of spherical graphite particles into a lithium-ion battery anode) is **high at 0.97 kg/litre**. This is well above the industry standard of 0.90 kg/litre.

iii) **Purification** of the spherical graphite:

- Low-temperature alkaline (sodium hydroxide - NaOH) caustic roast with hydrochloric acid (HCl) achieved minimum saleable battery grade (>99.9% Cg) of 99.93% Cg SpG purity.
- The addition of a minimal HF wash finish resulted in the achievement of **99.96% Cg** (LOI 800°C) **premium battery-grade spherical graphite purity**.
- This outstanding purity result was confirmed with Inductively Coupled Plasma (ICP) analysis, showing negligible levels of deleterious elements.

The premium battery grade purity and physical properties of the Lac Rainy spherical graphite product have exceeded the specifications required by lithium-ion battery anode manufacturers.

Electrochemical (battery charging and durability) testing of the high purity spherical graphite has commenced. This work will test the performance of the spherical graphite as an anode material in lithium-ion batteries and will involve multiple testing cycles designed to measure the discharge efficiency of the material (irreversible capacity loss) and its durability or specific capacity (driving battery life). ProGraphite has advised the Company that the electrochemical test work will take approximately 10 weeks.

The Company anticipates strong results from the electrochemical test work, based on the premium battery-grade purity and outstanding physical properties of the Lac Rainy spherical graphite.

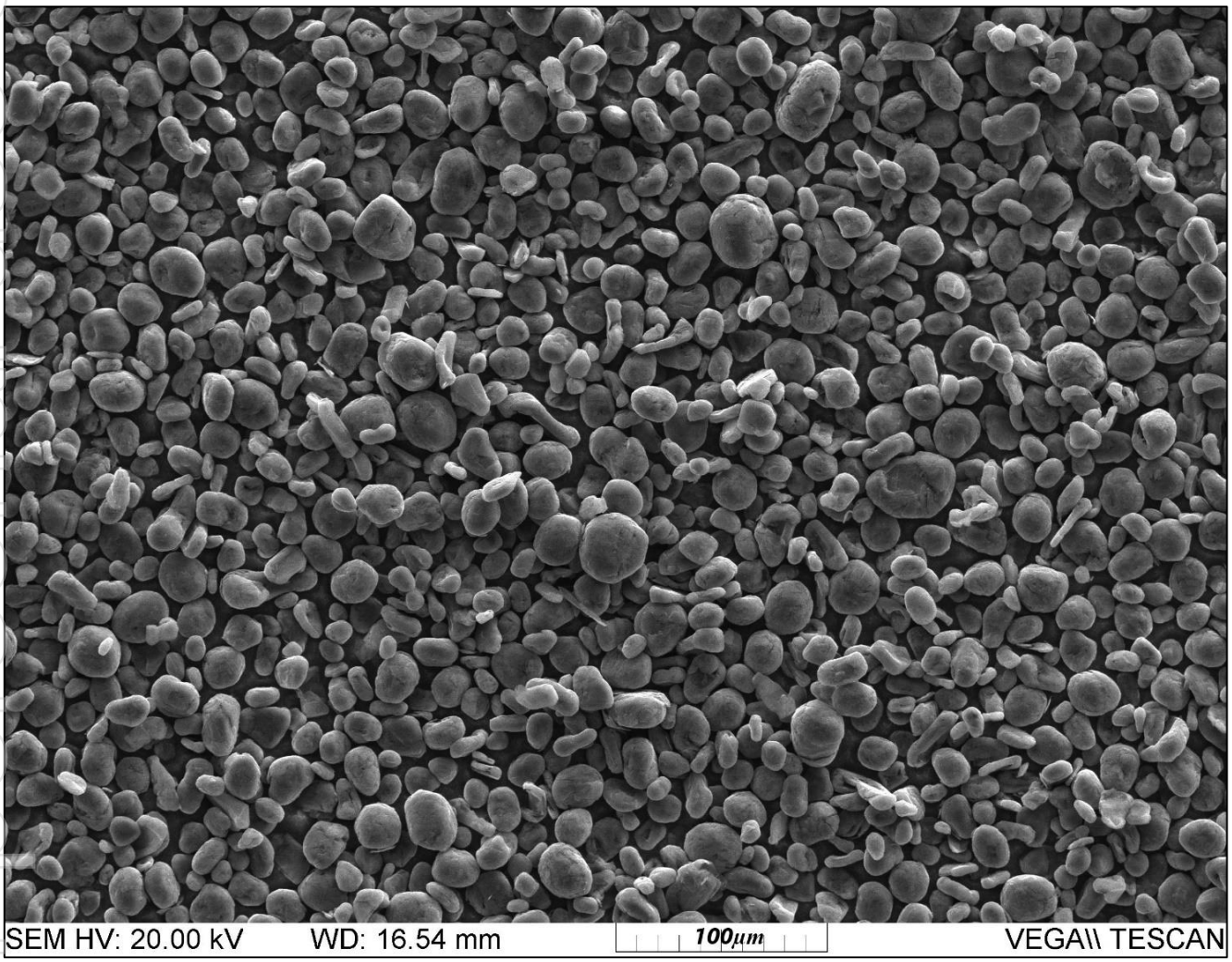

Image 1: Scanning Electron Microscope (SEM) image of Lac Rainy spherical graphite (average 20µm)

Next Steps

The achievement of premium battery-grade spherical graphite with outstanding physical properties has demonstrated the high-quality of the Lac Rainy graphitic material, particularly for production of high-quality spherical graphite to supply lithium-ion battery anode manufacturers.

In parallel with finalising the electrochemical (battery) test work in Germany, the Company will now look to rapidly advance the Lac Rainy project towards development.

The identified **Indicated and Inferred Mineral Resource of 13.3Mt @ 11.5% Cg** (including Indicated: 9.6Mt @ 13.1% Cg and Inferred: 3.7Mt @ 7.3% Cg)[3] is on the Carheil Trend, where only **1.6km of a 6km strike-length zone of identified graphite occurrences has been tested to date** (see Figure 1). The resource remains open along strike and at depth, indicating immediate upside for significant growth.

Further potential for resource growth has been identified on the West Carheil Trend (see Figure 1), where results averaging over 20% Cg, up to **28.5% Cg** were produced in previous sampling by the Company[4].

In total, **over 20km strike length of graphitic trends have been identified** through electromagnetics (EM) and/or mapping on the property, including the 1.6km strike-length resource zone drilled to date. Trenching and sampling will continue to test identified graphitic outcrops prior to initial drill testing.

The Company has identified more than 10 times the strike-length of graphitic trends than the 1.6km on the Carheil Trend that has been drilled to date[3]. This highlights the immense potential for resource growth within the project, which will be drill-tested in upcoming programs.

Preparations have commenced for a broad-spaced drilling and trenching program to expand Lac Rainy's outstanding high-grade graphite resource potential.

The new drilling and trenching programs will commence as soon as possible. The objectives of the programs are two-fold:

a) To expand Lac Rainy's resource potential, initially focussing on the Carheil Trend, and then the other graphitic trends identified, including the high-grade West Carheil Trend (Figure 1).

b) To produce diamond core bulk-samples of high-grade graphitic material from which to generate flotation concentrate samples for further down-stream spherical graphite test work, and to provide to potential customers/offtakers for evaluation and test work.

This drilling will also provide samples for further concentrate and downstream spherical graphite test work which will allow the Company to build on the previous Lac Rainy Scoping Study[6] results and carry out a pre-feasibility study (PFS).

The Lac Rainy Graphite Project is strategically located in Canada, close to the rapidly expanding electric vehicle (EV) and renewable energy battery market in the United States. The United States Government has declared a number of minerals 'critical', including graphite, and has passed the Inflation Reduction Act, which includes funding to source critical minerals projects outside China, primarily focussed in North America (United States and Canada).

The proposed PFS for Lac Rainy will follow drilling programs testing the greater resource potential of the project, demonstrating to customers the potential long-life of the project. The PFS will investigate flake-graphite concentrate production potential as well as downstream processing to produce value added products, including premium spherical graphite to supply directly to the North-American lithium-ion battery market where demand for battery-grade graphite is growing rapidly (Fastmarkets.com, 23/2/23). The close proximity to these markets provides a strategic advantage over other projects globally.

The Company has shown it can produce premium quality spherical graphite that exceeds battery maker specifications and, as the electrochemical testwork progresses, we will advance discussions with end-users across North America, Europe and other jurisdictions where lithium-ion battery manufacturing is being developed (e.g. South Korea and Japan).

About The Lac Rainy Graphite Project

The Lac Rainy Graphite Project consists of a contiguous holding of 92 mineral claims covering an area of approximately 45.5 km^2. The Project is located in a highly prospective region with numerous graphite occurrences and resources, in eastern Quebec, Canada (see Figure 1, below).

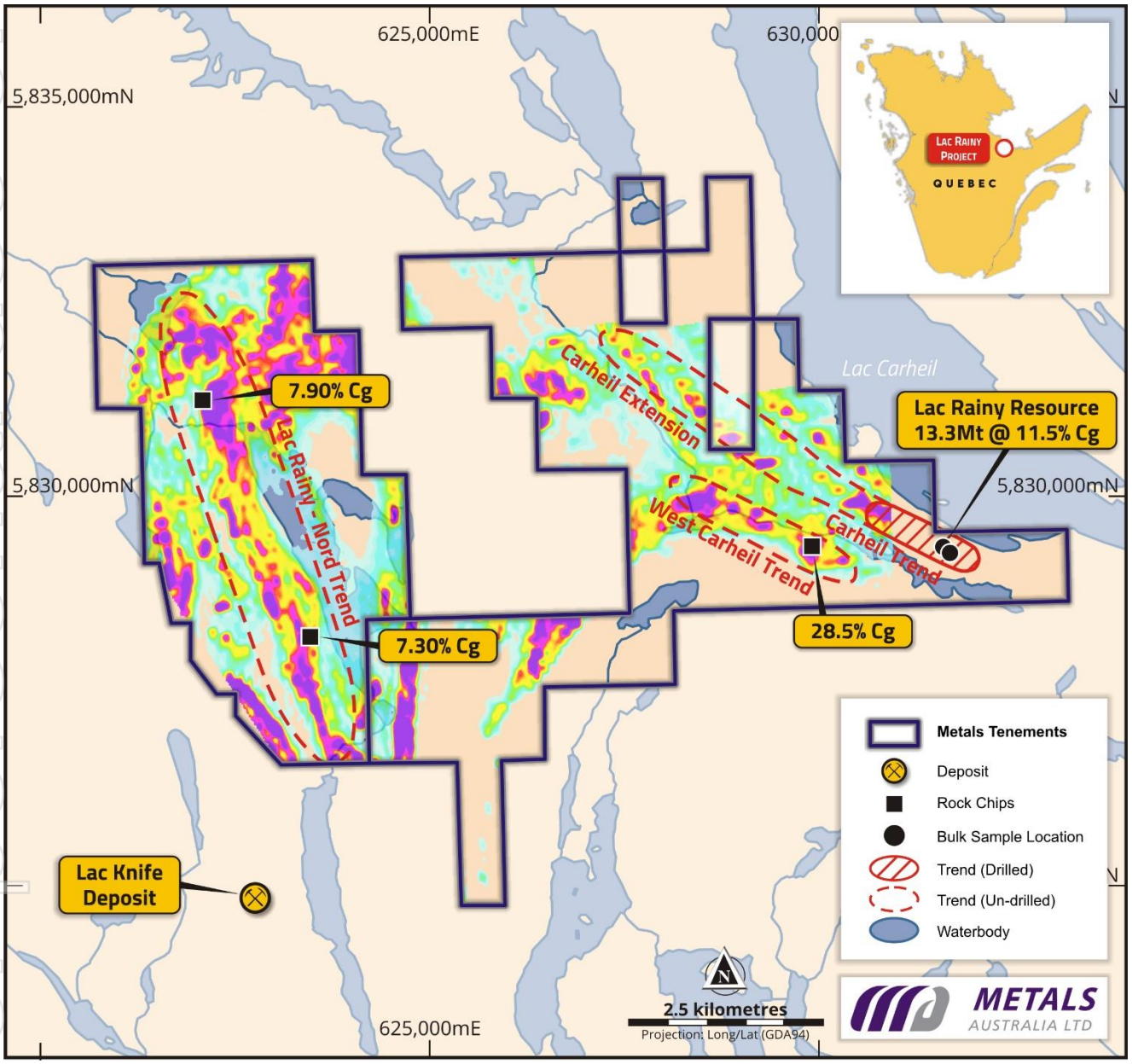

Figure 1: Location of the Lac Rainy Graphite Project with key prospect locations and airborne EM anomalies

The existing **Indicated and Inferred Mineral Resource of 13.3Mt @ 11.5% Cg** (including Indicated: 9.6Mt @ 13.1% Cg and Inferred: 3.7Mt @ 7.3% Cg)[3] at Lac Rainy of was released 15 June 2020[3].

Phase 1 metallurgical test work on Lac Rainy graphite resource material achieved a total graphitic carbon concentrate grade of **97.1% Cg,** with **up to 22.8% of the Lac Rainy graphite concentrate categorised in the large and jumbo flake size fractions[5].**

In 2020, Metals Australia completed a **Scoping Study[6] which demonstrated the potential of the Lac Rainy Project to generate high-operating margins** while producing up to 100kt of flake-graphite concentrate per annum *(The Company confirms that it is not aware of any new information or data that materially affects the information in the Scoping Study release of 03 February 2021[6]).*

Further, Phase 2 metallurgical test work was conducted on a bulk sample composite grading **16.2% Cg** which produced a combined concentrate grade of **96.8% Cg**[7] and included 13.9% in the larger flake, +150µm category. Subsequent pilot-scale test work produced 6.5kg of bulk flotation flake graphite concentrate at a combined reported grade of **94% Cg**[1] (target >94% Cg), which was re-assayed by ProGraphite in Germany, producing a higher concentrate grade of **96.3% Cg** (LOI 900°C).

ProGraphite has now completed spherical graphite and purification test work on the high-grade flake-graphite concentrate and **produced the high-quality, premium-battery grade (99.96% Cg) spherical graphite product** described in this release.

ProGraphite is now carrying out electrochemical (battery) test work to demonstrate charging qualities and durability of the Lac Rainy premium spherical graphite product.

Following the electrochemical (battery) test work, and the additional drilling program(s), the Company plans to upgrade the development studies to pre-feasibility level.

Project development options include building on the Scoping Study outcomes to develop mining and production of high-grade flake-graphite concentrate (>95% Cg) to supply the rapidly growing market for this material to supply battery grade spherical graphite producers. The concentrate will also include a component of larger flake (>150 micron) graphite which can be sold at a premium to expandable graphite and other large flake graphite product manufacturers.

Based on these outstanding spherical graphite test work results, the Company will now examine options for downstream processing the fine to medium flake (<150 micron) graphite concentrate. This will principally focus on production of high-quality, uncoated, spherical graphite to supply the high-demand for this product to produce battery anodes for the rapidly growing market for lithium-ion batteries in North America and globally[8,9].

This announcement was authorised for release by the Board of Directors.

*****ENDS*****

For further information, please refer to the Company's website or contact:

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About Metals Australia

Metals Australia is an active exploration and mining development company listed on the Australian Securities Exchange (ASX:MLS) with a high-quality portfolio of battery minerals/metals and gold projects in the well-established mining provinces of Australia and Canada.

Metals Australia's strategy is to create shareholder value through continued development of its advanced suite of projects and the discovery of new resources.

The Company's flagship **Lac Rainy Graphite Project** is located in a major graphite province in Quebec, Canada. Lac Rainy hosts a JORC-2012 graphite mineral resource that is one of the highest grade in the region, with potential to grow substantially.

In Western Australia, Metals Australia holds an 80% interest in the **Manindi Lithium/Base Metals Project,** located approximately 500km northeast of Perth. The Company has been drilling and defining the project's lithium pegmatite potential and extending the existing high-grade zinc with copper resources. The Company has also identified a new intrusive related vanadium-titanium discovery with copper-nickel-cobalt sulphide potential[10].

The Company also identified **outstanding lithium potential on its 100%-owned East Pontois and Felicie tenements located within the Patriot Battery Metals Inc.'s (ASX:PAT) Corvette Lithium Project** in Quebec, Canada[11]. The Company is undertaking remote-sensing data interpretation followed by intensive field work to delineate prospective lithium-bearing pegmatite zones within these highly prospective properties.

Metals Australia also has an 80% interest in Payne Gully Gold which includes the **Warrambie, Tennant Creek and Murchison Projects[12]**, giving the Company additional exposure to a suite of prospective battery metals and gold assets in known mineral provinces in Western Australia and the Northern Territory**.**

Cautionary Statement Regarding Forward Looking Information

This document contains forward-looking statements concerning Metals Australia Limited. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the company's beliefs, opinions and estimates of Metals Australia Limited as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

Competent Persons Statement

The information in this report that relates to exploration results, Mineral Resources and Exploration Targets has been reviewed, compiled and fairly represented by Mr Jonathon Dugdale. Mr Dugdale is a Technical Advisor to Metals Australia Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM'). Mr Dugdale has sufficient experience, including over 35 years' experience in exploration, resource evaluation, mine geology and finance, relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Dugdale consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this document that relates to metallurgical test work is based on, and fairly represents, information and supporting documentation reviewed by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd, who has been engaged by Metals Australia Ltd to provide metallurgical consulting services. Mr Adamini has approved and consented to the inclusion in this document of the matters based on his information in the form and context in which it appears.

In preparing this announcement the Company has relied on the announcements previously made by the Company as listed under "References". The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement.

References

[1] *Metals Australia Limited, 27 July 2022.* Bulk Graphite Concentrate Finalised for Battery Testing.

[2] *Evolution Energy Minerals Ltd (ASX:EV1), 18 July 2022. Exceptional Yields and Electrochemical Performance of Coated Spherical Graphite.*

[3] *Metals Australia Ltd, 15 June 2020. Metals Delivers High Grade Maiden JORC Resource at Lac Rainy Graphite.*

[4] *Metals Australia Ltd, 20 April 2020. Prospecting Program Identifies New High-Grade Graphite Zone (Lac Rainy).*

[5] *Metals Australia Ltd, 30 June 2020. Metallurgical Testing Confirms Lac Rainy Graphite High Purity and Grade.*

[6] *Metals Australia Ltd, 3 February 2021. Lac Rainy Graphite Study delivers strong economics with Significant upside.*

[7] *Metals Australia Ltd, 28 February 2022. Outstanding 96.8% Flake Graphite Concentrate for Lac Rainy.*

[8] *Benchmark mineral Intelligence Report, Q1, 2021.*

[9] *Focus Graphite Ltd, 28 January 2014. Focus Graphite Reports a 92% Increase in Measured and Indicated Mineral Resources Categories at its Lac Knife Flake Graphite Project – to 9.6 million tonnes grading 14.77% Cg.*

[10] *Metals Australia Ltd, 31 January 2022. Quarterly Activities Report for the Quarter Ended 31 December 2022.*

[11] *Metals Australia Ltd, 15 December 2022. Metals Step-Up Lithium Exploration in Canada and Australia.*

[12] *Metals Australia Ltd, 16 June 2022. Metals Australia Acquires Key Battery Metals Projects.*

Appendix 2: JORC Code, 2012 Edition – Table 1 – Section 1 Sampling Techniques & Data

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• *Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.*	• Sampling method is half-core sampling of HQ diamond drill core (HQ:63.5mm). Quarter-core sampling utilised where a duplicate sample has been taken. • Sampling was carried out using Magnor Exploration Inc sampling protocols and QAQC procedures as per industry best practice, delivered by ALS. • Diamond drilling completed using WL66 coring equipment. Drillholes have been sampled on geological intervals or nominal 1.5 m intervals where appropriate (approx. 3kg/sample). All samples have been crushed, dried and pulverised (total prep) to produce a sub sample for multi-element analysis by four acid digest with ICPMS, total graphitic carbon and sulphur by Leco.
Drilling techniques	• *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Diamond drilling completed by Magnor Exploration • WL66 (HQ) conventional diamond drilling with core diameter of 63.5mm. • All drillholes have been orientated.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Core recoveries are measured by the drillers for every drill run. The core length recovered is physically measured for each run, recorded and used to calculate the core recovery as a percentage of core recovered. Any core loss is recorded on a core block by the drillers. • Careful drilling techniques in areas of broken ground are employed with communication between the geologist and drillers to maximise core recovery. • A sampling bias has not been determined.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• *Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.*	• Sampling method is half-core sampling of HQ diamond drill core (HQ:63.5mm). Quarter-core sampling utilised where a duplicate sample has been taken. • Sampling was carried out using Magnor Exploration Inc sampling protocols and QAQC procedures as per industry best practice, delivered by ALS. • Diamond drilling completed using WL66 coring equipment. Drillholes have been sampled on geological intervals or nominal 1.5 m intervals where appropriate (approx. 3kg/sample). All samples have been crushed, dried and pulverised (total prep) to produce a sub sample for multi-element analysis by four acid digest with ICPMS, total graphitic carbon and sulphur by Leco.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• All drillcore has been transported from the drill sites to the laboratory by company representatives for cleaning, reconnection of core lengths and measurement of metre marks where required, over the entire hole. • Geological logging has been completed on the entire length of all holes by Magnor exploration who has significant experience in this style of exploration and mineralisation. • The lithological, mineralogical, alteration and structural characteristic of the core has been logged in digital format and following established procedures. • All drillholes have been photographed in both wet and dry states.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sub- sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second- half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample preparation follows industry best practice standards and is conducted by internationally recognised laboratories - ALS Laboratories Ltd in Val d'Or, Quebec. Code RX1-graphite was completed as preparation. Samples are crushed to 80% passing 10 mesh, riffle split (250 g), and pulverized to 95% passing 105 micron. • Analysis used ALS packages Code 4F-C,S, and 4F-C-Graphite using a graphite specific preparation (RX1-Graphite). Total carbon as well as graphitic carbon are the primary deliverables. • Sampling techniques utilized, as described above, ensure adequate representativeness and sample size. During the drilling, industry standard sampling techniques were followed with fresh material sampled. • No blanks or standards were submitted by the company with laboratory blanks, standards, and duplicates relied upon, with results reviewed by the companys consultants and found to be satisfactory with no material concerns. Maxwells Data management systems for appraisal of the QA/QC indicated no issues • The sample sizes are considered appropriate for the type of mineralisation under consideration.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Selected samples are assayed for total graphitic carbon and sulphur via Leco furnace. Graphitic carbon is determined by digesting the sample in 50% HCl to evolve carbonate as CO2. Residue is filtered, washed, dried and then roasted at 425^{0}C. The roasted residue is analysed for C and S by high temperature Leco furnace with infrared detection. • The analytical methods are considered appropriate for this style of mineralisation. • No geophysical tools or handheld instruments were utilised in the preparation of this announcement. • Duplicate sampling has been completed at a rate of 1:40 where practicable; duplicate results for all holes are satisfactory. • Certified reference material standards and blanks have been inserted at a rate of approximately 1:20; standard and blank results for all holes are within accepted limits. • Laboratory QAQC methods include the insertion of certified reference material standards, blanks, and duplicates. • The metallurgical test work was conducted at ProGraphite laboratory in Germany. The Graphitic Carbon (Cg) purity at this stage was measured by ProGraphite by Loss on Ignition (LOI) at 800 degrees. Other Repeat QC LOI analysis on the final concentrate yielded the initial result of 99.96% Cg. Further repeats confirmed this result (+/-0.02% Cg).

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Quality of assay data and laboratory tests (cont.)	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Micronising was conducted by a hammer mill with an internal classifier to remove ultrafine material • Spheroidising was conducted using a hammer mill with different settings and impactors to change the shape of the particles into spheres. This mill also has an internal classifier to remove any ultrafine material generated during this process. • Tap density and specific surface area (BET) measurements were completed on the spheroidised material. • Size analysis of the spheroidised material was determined by a laser sizer. • In order to purify the spheroidised graphite, caustic soda was added to the spheroinised graphite which was then roasted at low temperature. The residue was then leached with hydrochloric acid followed by a final hydrofluoric acid leach to remove the final impurities. Intermediate water washes were conducted to remove any residual chemicals and dissolved ions.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Determination of the reported downhole intervals of mineralisation have been verified by alternative company personnel both in person and via electronic photographic data. • No twin-hole drilling completed to date although several neighboring holes holes have been completed and showed excellent correlation. • All geological and location data is stored in Excel spreadsheets prior to being uploaded to the Company's database. Data entry has been by manual input and validation of the data has been done by checking input on-screen prior to saving. • No adjustments or calibrations were made to any assay data used in this report.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drillhole locations were planned using a combination of GIS software packages. • Drillhole locations were determined originally using a Garmin handheld GPS unit with an accuracy of +/- 1m. Drill collar azimuths were determined with a hand-held Sunto compass that has a precision of +/- 0.5 degrees. • Subsequent DGPS survey methods established drill collars to a 0.25 m level of accuracy. • Downhole surveys were completed using a Devico Deviflex downhole survey instrument at regular intervals. • Original Grid system is UTM NAD 84 Z 19 • Topographic control has been established by handheld GPS and cross- correlation with digital laser topographic imagery.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drill hole profile spacing varies from 25-40, to 120 metres on the margins is at 50m, 25m or 12.5m. See attached location plans, cross sections and tables. • Previous work including mapping, trenching, rock chip sampling of outcropping ore and detailed electromagnetic (EM) geophysical data show and confirm excellent continuity of the stratigraphic graphite unit. The current drillhole spacing at the East and West deposit is considered appropriate to allow for the JORC-compliant Mineral Resource Estimate (MRE) to be completed at the Indicated and Inferred resource categories. • Through the main graphite zones, nominal 2m sampling has been applied where appropriate and sampled to geological boundaries elsewhere.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The drillhole orientation is considered appropriate with the drill holes being drilled perpendicular to the interpreted strike of the geological units and graphite mineralisation. The graphite units across the Project dip steeply (80- 90°) to the west and drilling to date has been completed drilling across-dip.
Sample security	• *The measures taken to ensure sample security.*	• All drill core was transported by courier transport from the project to the ALS laboratory in Quebec
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits or reviews of the sampling techniques and data have been completed to date. Results have been reviewed internally by the company's geologists, with independent assessment of the QA/QC by Mawells. With no issues have been identified.

Appendix 2: JORC Code, 2012 Edition, Table 1 – Section 2 Reporting of Exploration Results

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Metals Australia Limited is the 100% owner of the Lac Rainy Graphite Project, pursuant to the binding acquisition agreement. • There are no other known material issues affecting the tenements. • Quebec Lithium Limited, a wholly owned subsidiary of Metals Australia , is the owner of 100% of the graphite project, and ownership of the individual CDC claims is held by Quebec Lithium Limited. • All tenements are in good standing and have been legally verified by a Quebec lawyer specializing in the field. • The licence is in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No modern exploration has been conducted by other parties. • Government mapping records multiple graphitic carbon bearing zones within the project area, but no data is available.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Lac Rainy graphite project is located in close proximity to Focus Graphites Lac Knife Project, which is hosted in a similar geological environment. • The projects were first discovered in 1989, and has been subject to basic geological review since then. • The project area geology (hosting the Lac Rainy graphite deposits) is situated within the Gagnon Group, which is the metamorphosed equivalent of the Ferriman Group in the Labrador Trough. The formations within the Ferriman Group consist of Wishart (arenitic quartzite with variable mica and calcite), Ruth (ferruginous mudstone chert), Sokoman (iron formation), and Menihek (mudstone/mica schist), as well as intrusive basalt. The Nault Formation of the Gagnon Group, comprised of graphite-bearing quartz biotite garnet paragneiss (metamorphized equivalent of the Menihek Formation), underlies the majority of the Lac Rainy Property and is the primary target rock unit. • The host lithology consists of a sub-vertical, lithologically continuous unit of very fine-grained dark grey to black graphite rocks containing between 1-28% graphitic carbon and appreciable quantities of sulphides ranging in grade from 0.01-18.8% sulphur. A number of parallel units have been identified from the mapping, channel sample and drilling. • The lithological units are variably folded and faulted, with true widths up to 70m and have local continuity over hundreds of metres and regionally extend over many kilometres. Pyrite, pyrrhotite and trace chalcopyrite accompany the graphite mineralisation and the sub-vertical orientations present today.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Drillhole information pertaining to the drilling at Lac Rainy is summarised in the figures and tables in the text of previous ASX releases related to the drilling results at Lac Rainy.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• A nominal cut off of 5% graphite has been used in any reporting previously conducted. • No high-grade cut-off has been used. • Length-weighted averaging has been used to calculate all intercepts in this announcement. Length-weighted averaging has been used given that sampling intervals were determined geologically and not always nominally. • No metal equivalents have been used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	• The geometry of the graphite mineralisation at the Lac Rainy Project is quite well understood and all drilling has been completed perpendicular to the strike of the mineralisation. The main hangingwall graphite unit is sub-vertical and appears to have a variable dip (~80-90°). Several close spaced drillholes at Lac Rainy have highlighted the dip and azimuth of the mineralised zones. • Tighter spaced drilling is required to confirm the dip of the units but the drillhole information received to date confirms any previous interpretation. as modelled.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate maps and cross-sections have been included in the text of previous announcements.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration results.*	• All significant intercepts above the nominal cut-off grade of 5% Cg have been reported in the text of previous ASX releases related to the drilling results at Lac Rainy.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• A substantial amount of work has been completed at the Lac Rainy Project by Metals Australia. Work has included geophysical surveys, rock chip sampling, MMI soil sampling, trenching, diamond drilling and metallurgical testwork.
Further work	• *The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Completion of downstream (Phase 3) metallurgical testwork including spheronisation, purification and battery testing in Germany prior to upgrade studies to PFS level. • Further exploration targeting and drilling of high-grade graphite extensions to be carried out. • Drilling to generate of additional composite samples for concentrate variability testing and further downstream testwork for potential offtake partners.